A SCIENTIFIC CATALOGUE

Bernard Quaritch's General Catalogue. Part II. Natural History and Science. Part III. Periodicals, Journals, and Transactions. (London: 1881-83.)

IN few instances that a political economist could hold up as an example is the function of the merchant in the processes of supply and demand so clearly and simply displayed as in that of Mr. Bernard Quaritch, the wealthy merchant in the book trade. He is especially a merchant-man seeking goodly pearls, whose great qualification must be that he knows the exact demand for, and the exact scarcity of, what is to be bought and sold. His catalogue does not aim at completeness as did the one which we noticed lately. Scarcely more than one-tenth of the titles carefully entered in Mr. Friedländer's lists are to be found here; but these make a collection, and a very large one, of books brought together by "natural" selection with the same good results in this case of intelligent working, as in the more automatic world around us. Many eminent men in various branches of science have first selected books bearing upon their own subjects, and then, on the dispersion of such libraries, Mr. Quaritch selects those works which have a higher value through their own superior merit, or the often doubtful though highly-prized recommendation of rarity. Accordingly Mr. Quaritch's catalogue is considerably like the sum total of British legislation. Each item of it was the supply of an existing want according to the best light of the time of its production. While circumstances, however, have changed and fresh laws have been devised to meet the changed circumstances, old laws have remained upon the statute book, and the existing code contains at the same time both inconsistent repetitions and grave deficiencies, and lacks both symmetry and completeness. While the catalogue of Mr. Friedländer shows the German love of both these good qualities and the scientific tastes of the compiler, that of Mr. Quaritch does not profess to be complete in any sense; it is a list of an immense stock of books brought together, as their former possessors ceased to require them, by a shrewd man of business who knew their market value. Hence in examining these bound up volumes which contain the many rich prizes of scientific literature constituting Part II. and Part III. of a new "General Catalogue," one is not surprised to find that a book like Agassiz's "Nomenclator Zoologicus" is to be found in four different places in one of them; that five copies of Owen's "Odontography" are offered, and a variety of copies of many others.

In Friedländer's catalogue we had to complain of too much classifying; not because classification is not of extreme value as a ready guide to the contents of a catalogue or library, but because many books refuse to fall under one head only, however discreet may be the arrangement. Mr. Bernard Quaritch's catalogue is just the reverse. In these volumes there is no attempt at either alphabetical or subject-divisions of the whole collection; different divisions are lists of books purchased at particular sales. A concise index makes up perhaps in the best way for this utter confusion of subjects. The table of contents, to which one would look first in trying to understand such a catalogue, is not printed in a way to clearly express the arrangement of those titles which *are* classified in subjects. A list of thirteen natural history headings follows "Egypt and North Africa" in exactly the same way as a nearly similar list of fourteen follows "The British Isles," but the former has nothing to do with Egypt as the latter had to do with the British Isles.

But Mr. Quaritch is the great connoisseur in a different class of books from the works which draw our attention in his catalogue. This class it would hardly come within our province to notice, were it not for the evidence given here, on the one hand, that costly books are purchased now as much as of old by the "patron" of literature, and on the other, that scientific works of original value and present scarcity are bought up by mere book collectors or bibliolaters, who would in many cases fret while one of their precious volumes was being turned over for consultation, lest it should end in a crack in its beautiful binding! Mr. Quaritch labours abundantly, and not without love, we think, for these purchasers. Here are a few of the feminine pomps and vanities with which he tickles the ears of bibliomaniacs:—"Grolier binding," "variegated leathers," "gold scroll tooling," "purple morocco super extra," "veau fauve," "veau marbré," "arms and cypher of ———," "vellum fly-leaves," "large paper," "tall copy," "magnificent specimen of bibliopegistic skill." Here is a titbit:—"First Aldine edition, very large, fine copy, in blue morocco, gold tooling, silk lining, vellum fly-leaves, gilt gaufré edges, by Bozerian."

A distinguishing feature in Mr. Quaritch's catalogues are the valuable notes appended to nearly all the most important of the works he offers. These notes as to the scarcity, completeness, market value, and often the history of the book testify to both the extent of his business and the minute accuracy of his knowledge of it. They are a mine of valuable information to any one whose business is in books, either commercially or as a librarian intrusted with the care and also the completion of important collections. In few cases will a book only professing to be a stock-list itself command a price in the market. Mr. Quaritch's catalogues command a high price, and the new edition of his general one, of which seven parts are now out, and which will probably not be completed for another year, if it should be the last which our veteran publishes, will doubtless remain for some time to come a standard work upon literature.

LETTERS TO THE EDITOR

[*The Editor does not hold himself responsible for opinions expressed by his correspondents. Neither can he undertake to return, or to correspond with the writers of, rejected manuscripts. No notice is taken of anonymous communications.*

[*The Editor urgently requests correspondents to keep their letters as short as possible. The pressure on his space is so great that it is impossible otherwise to insure the appearance even of communications containing interesting and novel facts.*]

Elevation and Subsidence

FOR several months past articles and letters have appeared in NATURE on the subject of subsidence and elevation of the earth's crust by addition and removal of weight. In this connection also much has been said in regard to the history of the idea. I wish therefore to draw attention to the fact that in 1859 I read a paper before the American Association for the Advancement of Science on the subject of the "Formation of Continents

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and Ocean Basins," in which, after giving the views of Herschell and Airy, I bring out this idea very prominently, and illustrate it by many diagrams. An abstract of this paper, by Sterry Hunt, was published in the *Canadian Naturalist*, vol. iv., 1859, p. 293, and reference to it will be found in the "Royal Society Catalogue," vol. iii. p. 919.

A very brief outline of the paper is as follows:—I make two assumptions: (1) an internal liquid with floating crust; (2) the crust of continental areas more conductive and therefore cooling and thickening more rapidly than that of oceanic areas.

It is evident that under these assumptions inequalities would commence first on the under surface of the crust by additions there, making convexities beneath the continental and concavities beneath the oceanic areas. But by *flotation* these inequalities on the under side next the liquid would be reproduced on the upper side next the atmosphere, and by this means alone continents would grow continually higher, and ocean beds deeper. Now add to these erosion. By cutting down continents and filling up the seas erosion would tend constantly to destroy these inequalities, while flotation would tend as constantly to reproduce them. Thus according to this view the continents rise partly by additions beneath and partly by removal above, and similarly the ocean beds sink partly by increased concavity beneath and partly by additions above. But evidently if unequal thickening should stop, flotation could only *partly* restore the inequalities destroyed by erosion.

Except the abstract above referred to, the paper was never published, and in February, 1865, it was destroyed, along with much else, by Sherman's army. My reason for not publishing more fully was that I soon became dissatisfied with it; for about that time the views of Hopkins and Pratt on the solidity of the earth began to attract attention, and I became convinced that dynamical geology must be reconstructed on a basis of a solid earth. But now that the idea of a sub-crust liquid or semi-liquid layer is becoming prominent (a condition which would not probably interfere with the substantial solidity of the earth in its astronomical relations), it seemed to me important that this long forgotten paper should be brought forward merely as a part of the history of the subject.

Now a few words on the subject of the communications referred to in the beginning of this letter. It seems to me that some of your correspondents have gone too far in regarding unloading by erosion as a cause of elevation. Evidently there must be some other and more fundamental cause, or erosion could not act. Evidently erosion can only partly restore an elevation produced by some other cause. Erosion is primarily an effect of elevation, only in this as in so many other cases the effect may react as a cause, to maintain the elevation. For example, the Colorado plateau region has been raised since Cretaceous times about 20,000 feet, but the maximum general erosion has been only about 12,000 feet. The erosion has been, therefore, the consequence, not the cause, of elevation, for it is impossible that the cause should lie so far behind the effect. I give this one example because it is on so large a scale, but every mountain range furnishes an example of great erosion as an effect of elevation produced by other causes. That loading and unloading the crust is a cause of subsidence and elevation there is little doubt, but that there are other and far more important causes is certain.

Berkeley, Cal., December 3 JOSEPH LECONTE

Red-deer Horns

IN continuation of my remarks on the eating of shed deer-horns by other deer, I have to add that six shed horns in various stages of erosion have been sent to me from Sutherlandshire. They each bear well defined teeth-marks on the gnawed portions, and this leaves little if any doubt that the popular belief that the horns are eaten by deer is founded on fact. The accompanying interesting letter from Mr. James Inglis, which gives the evidence of two experienced stalkers, both most intelligent and reliable men, is further confirmation of a curious though no doubt very natural habit of the deer, which finds in the lime-salts of the horn a necessary element of nutrition. You will observe that Inglis believes the deer use the molars in eating the bone, and this seems probable enough, as they apparently always begin at the points and eat towards the beam and burr, a method of proceeding by which they can bring portions of the horn within the action of the molars. J. FAYRER

December 27, 1883

". . . I send a few red deer horns that have been partially gnawed by deer in the forest. I asked the stalkers to keep a look out and see if they could find any deer eating horns, and am glad to say that they have been able to put the matter beyond all doubt.

"Donald McRae saw with his glass a stag, in Dunrobin Glen, eating a horn; he went to the place where he saw him eating it, and found it partially eaten. I send it with the others. You will find a ticket on it to distinguish it from the rest.

"Duncan McPherson saw with his glass a hind, last week, eating a horn also; he did not find the horn, but he saw her (the hind), quite plainly, with it in her mouth, gnawing away at it near the point.

"Deer have no incisors in the upper jaw, but they have grinders or molars in both upper and lower jaws, formidable enough to eat any horn, and I have no doubt that it is with their molars that the horns are eaten.

"A shepherd in the parish of Lairg has a cow that eats all the bones she can find, and goes miles for them, and eats them up, shank bones and all; ribs are eaten easily, and seem to give no trouble whatever. "JAMES INGLIS

"December 24, 1883"

On the Absence of Earthworms from the Prairies of the Canadian North-West

NOT by any means the least remarkable of the very notable series of works which Mr. Darwin has given to the world is that which came last from his pen but a short time previous to his lamented death. Dealing, as it does, with effects which, when looked at in the detail, are exceedingly small and insignificant, but, when viewed in the aggregate, are shown to be of surprising importance, the "Vegetable Mould and Earthworms" must certainly rank as a most strikingly interesting work.

It is not my desire to call in question the conclusions at which Mr. Darwin has arrived with regard to the action of earthworms in cultivating the soil, but I wish to point out that in one extensive portion of the earth's surface, to which much attention has of late been directed on account of its agricultural capabilities, earthworms do not exist. I refer to the vast region commonly known as Manitoba and North-West Territories. My friend, Mr. E. E. T. Seton, of Carberry, Manitoba, was the first to point out to me that this enormous country must be regarded as forming an exception to Mr. Darwin's generalisations, on account of the total absence from it of every kind of earthworm, and, having lately returned from a visit to these regions, I can add my testimony to his in this particular, as well as in the matter of the amazing, innate fertility of the soil, which has been the wonder and remark of all travellers for years past, but which, in this case, obviously cannot be attributed to the action of worms, since these do not exist there. In addition to my own observations, I have the testimony of numbers of intelligent settlers, most of whom had been several years in the country, but all of whom unhesitatingly assured me that such a thing as an earthworm was unknown. Further, Mr. Leo Rogers, son of Mr. Thos. Rogers of Manchester, who has spent several years with the engineers of the Canadian Pacific Railway, has informed me that earthworms are unknown between Winnipeg and the Rockies. This being the case, it does not seem reasonable to suppose that they exist anywhere in the huge territory still further to the north, and comprising upwards of 3,000,000 square miles of land, or something like one third of the entire North American continent, and which may therefore be regarded as forming an exception to Mr. Darwin's statement (p. 120), that "Worms are found in all parts of the world, and some of the genera have an enormous range. They inhabit the most isolated islands; they abound in Iceland, and are known to exist in the West Indies, St. Helena, Madagascar, New Caledonia, and Tahiti. In the Antarctic regions worms from Kerguelen Land have been described by Ray Lankester, and I have found them in the Falkland Islands. How they reach such isolated spots is at present quite unknown." In connection with the statement (p. 121) that "Worms throw up plenty of castings in the United States," it may be pointed out that the boundary line (the 49th parallel) is to some extent a natural one, from which the rivers run both north and south. Further, I have been assured by friends, and have also seen with my own eyes, that earthworms abound at Toronto and in other parts of Ontario. This being the case, an interesting inquiry arises as to the cause of the absence of worms from the North-West, and I can only suggest two probable reasons—the great cold of winter and the

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